CLAIMS:

1. A method for updating an image on a bi-stable display by driving at least a portion of the display from a current optical state to a final optical state, the method comprising:

driving the at least a portion of the display from the current optical state to a reference optical state;

wherein the reference optical state is selected based on the current optical state; and

driving the at least a portion of the display from the reference optical state to the final optical state.

2. The method of claim 1, wherein:

the bi-stable display comprises an electrophoretic display.

3. The method of claim 1, wherein:

the reference optical state is selected as an extreme optical state that is furthest from the current optical state.

4. The method of claim 1, wherein:

the current optical state, reference optical state, and final optical state are greyscale optical states.

5. The method of claim 4, wherein:

the reference optical state is selected as the white state when the current optical state is between full black and middle grey; and

the reference optical state is selected as the black state when the current optical state is between full white and middle grey.

6. The method of claim 1, wherein:

at least one of the current optical state, reference optical state, and final optical state is a color optical state.

7. The method of claim 1, wherein:

the reference optical state is selected independently of the final optical state.

8. The method of claim 1, wherein:

the reference optical state is selected as a middle point for image transitions towards an extreme black state as the final optical state when the current optical state is between full black and middle grey; and

the reference optical state is selected as the middle point for image transitions towards an extreme white state as the final optical state when the current optical state is between full white and middle grey.

9. The method of claim 1, wherein:

the driving of the at least a portion of the display from the current optical state to the reference optical state comprises applying a reset pulse to the at least a portion of the display; and

the driving of the at least a portion of the display from the reference optical state to the final optical state comprises applying, to the at least a portion of the display, an extreme driving pulse following the reset pulse and of opposite polarity.

10. The method of claim 9, wherein:

the driving of the at least a portion of the display from the current optical state to the final optical state comprises applying at least one pre-set pulse to the at least a portion of the display prior to and/or after the reset pulse.

11. The method of claim 9, wherein:

the applying at least one pre-set pulse comprises applying a single pre-set pulse having a polarity opposite to that of the reset pulse.

12. The method of claim 9, wherein:

the reset pulse comprises an over-reset pulse.

13. The method of claim 1, wherein:

when the current optical state and the final optical state are on the same end of a spectrum, the driving of the at least a portion of the display from the current optical state to the final optical state comprises applying a reset pulse (RN) to the at least a portion of the display followed by an extreme drive pulse (ED) of opposite polarity at least until the final optical state is reached; and

when the current optical state and the final optical state are on different ends of the spectrum, the driving of the at least a portion of the display from the current optical

state to the final optical state comprises applying a reset pulse (RN) to the at least a portion of the display at least until the final optical state is reached.

14. The method of claim 13, wherein:

the driving of the at least a portion of the display from the current optical state to the final optical state comprises applying at least one pre-set pulse to the at least a portion of the display prior to and/or after the reset pulse (RN).

15. The method of claim 14, wherein:

the applying at least one pre-set pulse comprises applying a single pre-set pulse having a polarity opposite to that of the extreme driving pulse.

16. A program storage device tangibly embodying a program of instructions executable by a machine to perform a method for updating an image on a bi-stable display by driving at least a portion of the display from a current optical state to a final optical state, the method comprising:

driving the at least a portion of the display from the current optical state to a reference optical state;

wherein the reference optical state is selected based on the current optical state; and

driving the at least a portion of the display from the reference optical state to the final optical state.

17. An electronic reading device, comprising:

a bi-stable display (310, 400); and

a control (100) for updating an image on the bi-stable display by driving at least a portion of the display from a current optical state to a final optical state, the control comprising:

means for driving the at least a portion of the display from the current optical state to a reference optical state;

wherein the reference optical state is selected based on the current optical state; and

means for driving the at least a portion of the display from the reference optical state to the final optical state.

18. A method for updating an image on a bi-stable display by driving at least a portion of the display from a current optical state to a final, extreme optical state, the method comprising:

for transitions wherein the current optical state and the final, extreme optical state differ, driving the at least a portion of the display from the current optical state to the final, extreme optical state comprises applying an extreme driving pulse (ED) with a duration that is proportional to a distance that particles in the bi-stable display must move to transition from the current optical state to the final, extreme optical state; and

for transitions wherein the current optical state and the final, extreme optical state are the same, leaving the at least a portion of the display unaddressed.

19. The method of claim 18, further comprising:

applying at least one pre-set pulse to the at least a portion of the display prior to and/or after the extreme driving pulse.

20. The method of claim 19, wherein:

the applying at least one pre-set pulse comprises applying a single pre-set pulse having a polarity opposite to that of the extreme driving pulse.